

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

28/07

see form PCT/ISA/220

PCT

REC'D 17 MAY 2005

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WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/GB2005/000076

International filing date (day/month/year)
12.01.2005

Priority date (day/month/year)
14.01.2004

International Patent Classification (IPC) or both national classification and IPC
A61L26/00, C08L1/08

Applicant
AVANTICARE LTD

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/GB2005/000076

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
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International application No.
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Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1,27,31,32
Inventive step (IS)	Yes: Claims	
	No: Claims	1-32
Industrial applicability (IA)	Yes: Claims	1-32
	No: Claims	

2. Citations and explanations

see separate sheet

Box No. VIII Certain observations on the International application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/GB2005/000076

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1. Prior art:

Reference is made to the following documents:

- D1: WO 98/40110 A (POLYBIOMED LIMITED; AL-LAMEE, KADEM, GAYAD; TAKTAK, YOUSEF, SAMIH) 17 September 1998 (1998-09-17)
- D2: EP-A-0 666 081 (BRISTOL-MYERS SQUIBB COMPANY) 9 August 1995 (1995-08-09)
- D3: EP-A-0 567 311 (BRISTOL-MYERS SQUIBB COMPANY; E.R. SQUIBB & SONS, INC) 27 October 1993 (1993-10-27)
- D4: WO 00/52092 A (E.I. DU PONT DE NEMOURS AND COMPANY; GODDARD, SIMON, JAMES; CAMBRIDGE) 8 September 2000 (2000-09-08)
- D5: US-A-4 813 942 (ALVAREZ ET AL) 21 March 1989 (1989-03-21)

If not indicated otherwise the relevant passages are those mentioned in the search report.

Document D1 discloses a gel for use as wound dressing comprising a) sodium pectate b) carboxymethyl cellulose and c) polyethylene glycol, wherein the sodium pectate and carboxymethyl cellulose are cross-linked by calcium ions.

Document D2 discloses a wound dressing comprising a gelling agent, e.g. pectin from citrus peel, a hydrocolloid, like carboxymethyl cellulose and a glycol, e.g. polyethylene glycol.

Document D3 discloses a wound dressing comprising a gelling agent, e.g. pectin from citrus peel, a hydrocolloid, like carboxymethyl cellulose and a glycol, e.g. polyethylene glycol.

Document D4 discloses a composition comprising a first polymer comprising

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arabinosyl-substituted xylopyranosyl units cross-linked with a second polymer comprising D-galacturonic acid units, e.g. a pectin, and use thereof as wound dressing.

Document D5 discloses dressings comprising citrus pectin and carboxymethyl cellulose for wound debridement and regeneration.

2. Novelty (Art. 33 (1) and (2) PCT):

- 2.1 Although document D1 does not explicitly mention "citrus complex carbohydrates" it seems that the pectin disclosed in D1 fall in the scope of these terms. Therefore it is considered that the disclosure of D1 anticipates claim 1. Claims 1 and 31-32 lack novelty under Art. 33(2) PCT.
- 2.2 The process that is subject-matter of claim 27 is disclosed in document D1 (see example on pages 8-9). Claim 27 thus lacks novelty under Art. 33(2) PCT.

3. Inventive step (Art. 33 (1) and (3) PCT):

- 3.1 Dependent claims 2-26 and 28-30 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step, the reasons being as follows: the preferred embodiments which are subject-matter of the dependent claims are either disclosed in D1 or are obvious alternatives to the disclosure of D1.
- 3.2 It is noted that even in the case were claims 1 and 27 would be considered novel an inventive step would not be acknowledged the for the following reasons:

Document D1 which is considered to the closes prior art discloses a gel for use as wound dressing comprising sodium pectate cross-linked to carboxymethyl cellulose by calcium ions and polyethylene glycol. The claims would differ in that the pectin is derived from citrus peel. The problem to be solved would thus be regarded as to provide alternative gel compositions. Documents D2 and D3 disclose the use of citrus peel pectines in wound dressing gels. It would thus be obvious to use citrus derived

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International application No.

PCT/GB2005/000076

pectines in the gel disclosed in D1.

Re Item VIII

Certain observations on the international application

4. The wording of claim 32 is unclear (Art. 6 PCT).
5. Claim 29 refers to the description contrary to Rule 6.2 (a) PCT.

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Box No. V Reasoned statement under Rule 43*b*/s.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1,27,31,32
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